On page 2, please replace the paragraph from lines 17 – line 34 though page 3, lines 1-3 with the following:

A method, apparatus, and computer program product for determining a drop probability for use in a congestion control module located in a node in a network are disclosed. A weight value for determining a weighted moving average of a queue in a node is first systematically calculated. The weighted moving average is ~~calculating~~ calculated and an average queue size for the node is determined based upon the weighted moving average. A control function associated with the congestion control module is evaluated using the average queue size to determine the drop probability. The weight value may be calculated by first determining a sampling period for measuring the queue size. Next, a time period for which samples significantly contribute to the average queue size is calculated. The weight is determined based upon the sampling period and the time period. In a further embodiment, the control function is calculated based upon predetermined system parameters. The control function may be selected based upon a queue policy for management of the queue. From the queue policy a threshold value which lies along the queue function curve is determined. This point provides a minimum value for the maximum point of the control function so as to avoid oscillations within the buffer. A maximum point may then be selected which resides outside of the curve for the queue function. The control function may then be selected so that the control function crosses through the maximum point. Thus, when the congestion control module drops packets based upon the drop probability determined by the control function the queue will not oscillate.

On page 15, please replace the paragraph spanning lines 10-30 with the following:

A value for I is then calculated (~~STEP~~ Step 1420). The value of I is determined as the result of two opposing conditions for affecting the exponentially weighted moving average. The first condition is to provide an acceptable approximation of the long-term average of the system assuming a constant number of flows, wherein the approximation accurately accounts for small perturbations in the instantaneous average. The second opposing condition for the queue averaging algorithm is the ability of the approximation to account quickly for changes to the system such as a substantial increase in the number of flows using the following assumptions of the network, which provides a compromise between the two conditions is found. In a communications network that has n flows flowing into a node which have the same average round trip time, the throughput of each flow is T=c/n and each flow has the same drop rate p. Additionally, it is assumed that the network implements a TCP congestion control algorithm in which the sending rate decreases when a packet is not acknowledged. In such a network, the sending rate over time is linearly increasing for a flow until a packet is dropped, when the rate is then decreased in half as shown in Fig. 15. The period of this function is denoted by P. The variation in sending rate is reflected in a similar variation in the queue size and thus the queue size has the same periodicity P. If the averaging interval of the moving average is equal to the period, then the average is equal to the long term average and the value does not change when the interval is translated in time. If the interval is smaller than the period I<P, then the average is no longer constant. For I>P, the moving average has a small variation, but converges rapidly to the long-term average.

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Please delete the existing Abstract of the Disclosure and replace with the new Abstract provided on the next sheet: